OVERVIEW OF TECHNOLOGY PROCUREMENT

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- What is Technology Procurement?
- History Early and Recent
- U.S. Examples
- Lessons Learned

WHAT IS TECHNOLOGY PROCUREMENT?

- A deliberate effort to organize buyer demand and establish buyer-seller dialogue, aimed at reducing the risks of market entry for a new technology.
- Overcome the "chicken-and-egg" problem:
 - » sellers reluctant to offer a new product without evidence of buyer demand, but...
 - » buyers don't ask for a product they aren't familiar with

STEPS IN TECHNOLOGY PROCUREMENT

- Organize "leading" buyers to identify needs and specify performance requirements
- Convince manufacturers to respond to this new market demand
- Broker discussions among buyers, sellers, and manufacturers
- Coordinate (or manage) a competitive procurement
- Support programs for market transformation

EXAMPLES OF TECHNOLOGY PROCUREMENT

- Early Examples (1800's): Chronometer for ocean navigation, Steam locomotive
- NUTEK (Sweden):
 - » 25+ projects in past 10 years
 - » Energy savings of 20-50%, cost reductions, important non-energy features
- IEA Annexe III:
 - Participants: Sweden (lead), US, Netherlands, UK, Finland, Denmark, Spain, Korea, and EU (+ possibly Australia, Germany, New Zealand)
 - » Projects: improved incand. lamp, HP dryer, multifunction copier, vending, motors

U.S. EXAMPLES OF TECHNOLOGY PROCUREMENT

- NYPA/CEE/DOE apartment-size refrigerator
- Horizontal-axis clothes washer
- Compact fluorescent lamps in multifamily buildings
- DoD/EPA "superlamp" (incandescent A-line replacement)
- GSA seat belts and air bags
- DOE study use of Federal purchasing to commercialize new technology

FUTURE OPPORTUNITIES FOR TECHNOLOGY PROCUREMENT

• Products:

- » lighting sensors/controls (cheaper, common protocol)
- » building-scale distribution transformers
- » LED traffic signals
- » Solar PV systems

Systems:

» energy-efficient "temporary" classrooms

Services:

- » duct sealing
- » building diagnostics and commissioning

LESSONS FOR DESIGNING A COPIER PROCUREMENT

- Performance/features that are significant but achievable, economic -- and marketable beyond first buyers
- Synergy: energy and non-energy features
- Allow enough time for product development, retooling, marketing plans
- Multiple "winners" vs single award
- Consider the copier <u>user</u>: attitudes, preferences, info./training needs, "system" issues (networking, document management)